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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/710,494

07/15/2004

Sharon A. Free

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EXAMINER

HWU, DAVIS D

ART UNIT

PAPER NUMBER

3752

MAIL DATE

DELIVERY MODE

11/04/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/710,494	Applicant(s) FREE ET AL.	
	Examiner Davis D. Hwu	Art Unit 3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-6 and 13-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6 and 13-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. After conducting an appeal conference on October 29, 2008, it was decided that this case is to be reopened for prosecution.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 4-6, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cope et al. (5,028,355) in view of MacDonald et al.

Cope et al. discloses a method of suppressing an explosion in a fuel tank, comprising: installing into the tank a reticulated polyurethane foam of a certain density, and having a volume of electrical resistivity of less than $10E12$ ohm-cm, wherein one or more antistatic agents is added in situ to a foam-forming mixture to prepare the foam, the antistatic agents being a metallic salt of sodium or potassium. Cope et al. do not disclose a density less than 1.0 pounds per cubic feet, however, MacDonald et al. teaches a polyurethane foam which suppresses an explosion in which the foam has a density a density less than 1.0 pounds per cubic foot (column 2, lines 14-15). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the reticulated polyurethane foam of Cope et al. to have a density less than 1.0 pounds per cubic feet as has been taught by MacDonald et al. in forming an explosion suppression foam. Although Cope et al. do not disclose the resistivity of

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less than $10E12$ ohm-cm at 70 degrees F, it would be obvious to one having ordinary skill in the art that the resistivity would be less than $10E12$ ohm-cm at 70 degrees F since 70 degrees F is normal atmospheric temperature. The amount foam to be installed in the tank as recited in claim 5 would have been a matter of design choice as would have been the amounts of the agents as recited in claim 14, and the foam can be installed in the fuel tank of an aircraft.

4. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cope et al. in view of MacDonald et al. as applied to claim 1 above, and further in view of Triolo. Triolo teaches a foam forming process comprising using vacuum conditions from 0.6 to 0.95 bar to obtain a required foam density. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have prepared the reticulated polyurethane foam under controlled vacuum conditions from 0.6 to 0.95 bar to achieve the required foam density.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davis D. Hwu whose telephone number is 571-272-4904. The examiner can normally be reached on 8:00-4:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Len Tran can be reached on 571-272-1184. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is

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available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Davis D Hwu/

Primary Examiner, Art Unit 3752

/Len Tran/

Supervisory Patent Examiner, Art Unit 3852